

## WHAT IS CLAIMED IS:

1. A color image processor for converting an input image data containing color-separated red, green and blue color signals into an output image data containing cyan, magenta, yellow and black colors, which are used in a color output device, comprising:

5 an object identifying circuit for determining whether a data format of the input image data is a non-picture format or a picture format;

first processing means for performing a color conversion for the input image data of the non-picture image format and, when values of the respective color-separated input signals are minimum, making values of the respective  
10 cyan, magenta and yellow color output signals minimum and a value of the black color output signal maximum; and

second processing means for performing a color conversion for the input image data of the picture image format, setting the cyan, magenta and yellow color output signals to temporary values slightly smaller than the maximum  
15 values, when the values of the respective color-separated input color signals are minimum, and obtaining final cyan, magenta, yellow and black color output signals by processing the temporary values by a Black-Generation and Under-Color-Removal processing corresponding to said color output device.

2. A color image processor as claimed in claim 1, wherein said first processing means and said second processing means include common BG/UCR processing means for performing the Black-Generation and Under-Color-Removal processing, said first processing means includes a first color  
5 conversion circuit for converting the red, green and blue color-separated signals of the input image data of the non-picture format into the cyan, magenta and yellow color output signals, setting the values of the cyan, magenta and yellow

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color output signals to the maximum, respectively, when the values of the color-separated red, green and blue color signals are minimum, respectively, and outputting the cyan, magenta and yellow color output signals having the maximum values to said BG/UCR processing means, said second processing means includes a second color conversion circuit for converting the red, green and blue color-separated signals of the input image data of the picture format into the cyan, magenta and yellow color output signals, setting the values of the cyan, magenta and yellow color output signals to values slightly smaller the maximum values, respectively, when the values of the color-separated red, green and blue color signals are minimum, respectively, and outputting the cyan, magenta and yellow color output signals having the set values to said BG/UCR processing means and said BG/UCR processing means includes a look-up table for outputting, for the input signal containing the cyan, magenta and yellow color output signals having the respective maximum values, the image output data including the cyan, magenta and yellow color output signals having the respective minimum values and the black color output signal having the maximum value and, for the input signal containing the cyan, magenta and yellow color output signals, at least one of which has a value smaller than the maximum value thereof, the image output data corresponding to said color output device.

3. A color image processor as claimed in claim 2, wherein an amount of the Black-Generation and Under-Color-Removal processing is set in said look-up-table such that a continuity between the color image data of the non-picture image format and the color image data of the picture image format is maintained.

4. A color image processor as claimed in claim 2, wherein an amount of the

Black-Generation and Under-Color-Removal processing for only a color region in which the values of the cyan, magenta and yellow color output signals are close to the maximum values, respectively, is set in said look-up-table.

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